## DEPARTMENT OF THE INTERIOR

## TRANSCRIPT OF PROCEEDINGS

In the Matter of

NATIONAL PETROLEUM COUNCIL MEETING

Date: October 19, 1954

ALDERSON REPORTING COMPANY :
OFFICIAL REPORTERS
308 NINTH ST. N. W. WASHINGTON D. C.
Telephone: National 9-3408

## NATIONAL PETROLEUM COUNCIL MEETING

CCTCBER 19, 1954

Room 5160

Department of Interior

Washington, D. C.

## PROCEEDINGS

CHAIRMAN HALLANAN: Gentlemen, the Council will please come to order.

early days, back in this conference room of the Interior
Department. It has been a difficult matter at times to
adjust ourselves to a date that was entirely acceptable to
the Secretary of the Interior and the Staff, and at the same
time a date where we could have the meeting room that we have
been occupying in the Government Department building for the
last year and a half. This was one of the times where we
had an impossible situation so we thought it might be a very
good thing to come back and rededicate ourselves in the room
where this Council was organized and started its program of
Government-Industry cooperation.

Mr. Secretary, will you please call the roll? SECRETARY BROWN: Mr. Robert O. Anderson?

MR. ANDERSON: Here.

SECRETARY BROWN: Mr. Hines H. Baker?

MR.BAKER: Here.

SECRETALY BROWN: As I call the name of a member who is not present but has asked someone to represent him, will the person who is representing that member please rise and give his name so that we may have it for the record?

Mr. Munger T. Ball?

MR. CALVERT: Floyd A. Calvert, representing Mr. Ball by proxy.

SECRETARY BROWN: Mr. T. H. Barton?

MR. BARTON: Right.

SECRETARY BROWN: Mr. Benedum?

MR. BENEDUM: Here.

SECRETARY PROWN: Mr. Bergfors?

MR. BERGFORS: Here.

SECRETARY BROWN: Mr. Blaustein?

MR. BLAUSTEIN: Here.

SECRETARY BROWN: Mr. Blazer?

Mr. Brazell?

MR. BRAZELL: Here,

SECRETARY BROWN: Mr. Bridwell?

Mr. Bruce K. Brown?

MR. BRUCE K. BRCWN: Here.

SECRETARY BROWN: Mr. Russell B. Brown.

MR. RUSSELL B. BROWN: Here.

SECRETARY BROWN: Mr. Burns?

MR. HAYES: F. J. Hayes for Mr. Burns.

SECRETARY BROWN: Mr. Chipman?

MR. CHIPMAN: Here.

SECRETARY BROWN: Mr. Coleman?

MR. JONES: A. P. Jones for Mr. Coleman.

SECRETARY BROWN: Mr. Cowden?

MR. ENDACOTT: Here.

SECRETARY BROWN: Mr. Fisher?

MR. FISHER: Here.

SECRETARY BROWN: Mr. Flenniken?

Mr. Follis?

MR. FOLLIS: Here,

SECRETARY BROWN: Mr. Foster?

MR. STANBAUGH: Stanbaugh for Mr. Foster.

SECRETARY BROWN: Mr. Fox?

Mr. B. C. Graves?

MR. B. C. GRAVES: Here.

SECRETARY BROWN: Mr, B. I. Graves?

Mr. Hallanan?

CHAIRMAN HALLANAN: Here.

SECRETARY BROWN: Mr. Hamon?

MR. WILD: Claude Wild.

SECRETARY BROWN: Mr. Hanks?

MR. HANKS: Here.

SECRETARY BROWN: Mr. Hardey?

MR. HARDEY: Here.

SECRETARY BROWN: Mr. Harper?

MR. HARPER: Here.

SECRETARY BROWN: Mr, Hartman?

MR. HARTMAN: Here.

SECRETARY BROWN: Mr. Hearin?

MR. HEARIN: Here.

SECRETARY BROWN: Mr. Hilts?

MR. HILTS: Here.

SECRETARY BROWN: Mr. Holman?

MR. HOLMAN: Here.

SECRETARY BROWN: Mr. Hulcy?

Mr. Jacobsen?

MR. JACOBSEN: Here.

SECRETARY BROWN: Mr. Jennings?

MR, JENNINGS: Here.

SECRETARY BROWN: Mr. Charles Jones?

Mr. W. Alton Jones?

MR. THORPE: Merle Thorpe for Mr. Jones.

SECRETARY BROWN: Mr. Kayser?

Mr. Keck?

MR. JCHNSON: Roger Johnson for Mr. Keck.

SECRETARY BROWN: Mr. Keeler?

MR. KEELER: Here.

SECRETARY BROWN: Mr. Kellogg? Mr. Dunbar now takes the place of Mr. Kellogg.

Mr. Lawton?

Mr. Leach?

MR. LEACH: Here.

SECRETARY BROWN: Mr. Ludwig?

MR. LUDWIG: Here.

SECRETARY BROWN: Mr. McCallen?

Mr. McCollum?

Mr. McDowell?

Mr. McFarland?

MR. McFARLAND: Here.

CHAIRMAN HALLANAN: Gentlemen, I desire to present a new member of the Council who succeeds one of the oldest members, Mr. John Lovejoy, President of the Seaboard Oil Company, whose place on the Council is now taken by Mr. McFarland.

Will you rise, Mr. McFarland?

(Applause)

SECRETARY BROWN: Mr. McGowen?

Mr. Maguire?

MR. MAGUIRE: Here.

SECRETARY BROWN: Mr. Majewski?

MR. MAJEWSKI: Here.

SECRETARY BROWN: Mr. Marshall?

MR, MARSHALL: Here.

SECRETARY BROWN: Mr. Mattei?

Mr. Maynard?

Mr. Moncreif?

MR. MONCREIF: Here.

SECRETARY BROWN: Mr. Mosher?

Mr. Naff?

Mr. Nielson?

Mr. Niness?

MR.NINESS: Here.

SECRETARY BROWN: Mr. Nixon?

Mr. Nolan?

MR. NOLAN: Here.

SECRETARY BROWN: Mr. O'Shaughnessy?

Mr. Parten?

MR. PARTEN: Here.

SECRETARY BROWN: Mr. Perry?

MR. PERRY: Here.

SECRETARY BROWN: Mr. Pogue?

MR. PCGUE: Here.

SECRETARY BROWN: Mr. Porter?

MR. PORTER: Here.

SECRETARY BROWN: Mr. Reitz?

MR. REITZ: Here.

SECRETARY BROWN: Mr. Richardson?

Mr. Ritchie?

Mr. Robineau?

MR. MYERS: Norman Myers.

SECRETARY BROWN: Mr. Robinson?

MR. COMERFORD: James Comerford.

SECRETARY BROWN: Mr. Rodman?

Mr. Rowan?

Mr. Scott?

MR. C'HARA: John O'Hara for Mr. Scott.

SECRETARY BROWN: Mr. Skelly?

Mr. Spencer?

MR. SPENCER: Here.

SECRETARY BROWN: Mr. Staples?

Mr. Parsons?

Mr. Supplee?

MR. SUPPLEE: Here.

SECRETARY BROWN: Mr. Swensrud?

Mr. Barton?

Mr. Taylor?

Mr. Thompson?

Mr. Vandeveer?

Mr. Vaughey?

Mr. Violette?

Mr. Vocke1?

MR. VCCKEL: Here.

SECRETARY BROWN: Mr. Ed Warren?

MR. J. ED. WARREN: Here.

SECRETARY BROWN: Mr. William Warren?

MR. WILLIAM K. WARREN: Here.

SECRETARY BROWN: Mr. Wescoat?

MR. WESCOAT: Here.

SECRETARY BROWN: Mr. White?

MR. WHITE: Here.

SECRETARY BROWN: Mr. Wilson?

Mr. Windfohr?

MR. WINDFOHR: Here.

SECRETARY BROWN: Mr. Woodward?

MR. WOODWARD: Here.

SECRETARY BROWN: Mr. Wrather?

Mr. Wright?

CHAIRMAN HALLAMAN: Gentlemen, it is my sad duty to officially announce to the Council that since our last meeting our greatly beloved and respected and important member of this Council was called suddenly, passed away, Mr. Max Ball.

Max Ball had been one of the keystones of this organization and had not only served as a member of the Council, but prior to that time had done a tremendously valuable and important job as Deputy Petroleum Administrator. We shall miss him greatly, I shall miss him greatly. He was a wise counselor and a great asset to this organization. I had felt that there should be an appropriate memorial at this time, and I appointed a committee of which Mr. Majewski is Chairman to present at this meeting a memorial tribute to our beloved member, Mr. Max Ball.

Mr. Majewski?

MR. MAJEWSKI: Resolution in memoriam to Max Waite Ball, distinguished American, a valued and highly respected member of the oil and gas fraternity, passed away suddenly on August 28,1954, thus bringing to a close fifty years of useful

and devoted service to the people of America and to the Government of the United States he loved with an intensely patriotic fervor.

Born in Geneseo, Illinois, in 1885, his mother took
Max and his sister, Catherine, to Manitou Springs, Colorado,
in the early 1890s, following the death of his father. His
early years were spent on the range as a guide and leader of
wild horses and burros. His dedication to geological investigations stems from his lifelong interest in the open country
nurtured during his early days on the range.

Max graduated from Manitou Springs High School and the Colorado School of Mines with a Mining Engineering Degree In 1914 he was graduated from the National University with a Bachelor's and Master's degrees. In 1947 he was admitted to law practice before the Supreme Court of the United States. In the early years of Max Ball's career, he was appointed geologist in charge of a field party with the U. S. Geological Survey, at the age of twenty-seven. He was later chairman of the Oil Board of that organization. He subsequently. for a short period, was with the U. S. Bureau of Mines, serving as the Bureau's first law officer. He was active in the preparation of the Mineral Leasing Act of 1920, under which mineral lands of the United States are disposed of by lease rather than sale, and, as a private consultant, aided in the passage of the legislation.

executive officer of various petroleum companies, actively engaged in exploration, production, and transportation of petroleum. In the early 1920s he was at various times in charge of exploration in the Rocky Mountains and adjacent areas for the Royal Dutch Shell Companies, headed a group of companies that consolidated the Standard Oil Company of Indiana in the Rocky Mountains and was head of the Western Pipeline Company. He became well known for his extensive work in connection with the development and first commercial separation of oil from the Athabasca oil sands in Canada during the late thirties and early forties.

Mr. Ball was a pioneer in the development of underground gas storage reserve and has become known as the outstanding authority in this field. He has written extensively on this subject, and the contributions that he made to the general knowledge in this field have been of substantial assistance to the petroleum and gas industries in developing effective means for meeting without interruption the vastly growing demand for adequate gas supply.

Max Ball was well known for his pioneering in the mapping of geological structures and many of today's producing oil fields in the Rocky Mountains are on structures that he drilled or proposed to drill thirty years ago.

Max Ball was internationally known as an expert on

the development of oil and gas industry world-wide. In recent years he had been the primary consultant to the Governments of Israel and Turkey.

During World War II, Max Ball served with intensely patriotic fervor and distinction as special assistant to the Deputy Administrator for the Petroleum Administration for War. In 1946 to 1948 the Federal government appointed him the first director of the Oil and Gas Division of the Department of the Interior to undertake the organization of that Division as successor to the Petroleum Administration.

In the period immediately following, he undertook a number of important assignments for the Federal government.

He was a member of the National Petroleum Council and served the Council as chairman or vice-chairman of important committees until his death.

Max Ball was widely known for his writings in oil and gas matters. In addition to several books that he had written, he had contributed extensively to the petroleum literature through papers, articles, and reports on geology, reservoir engineering, public land law, economics, internal relations and public policy.

Max Ball was the past president of the American
Association of Petroleum Geologists, which he had helped organize, and was a member of a number of other professional organi-

zations in which he served prominently. Among his many honors that were accorded to him were the Medal of Merit for Distinguished Achievement in the Colorado School of Mines, Freedom Foundation's Gold Medal for contribution to the American way of life.

In Max Ball, there was embodied those characteristics of leadership which marked the course of the American oil and gas industry. To this country's era of greatest industrial progress, Max Ball contributed the qualities of mind and heart that were needed to leaven materially impersonal efficiency.

expressed in the betterment of human relationships and the use of the products of his industry for the greater ease and comfort of man. With all that he bore himself modestly, learning much from others and transmitting that which he learned into an enlargement of his chosen industry and the enhancement of public welfare. His eyes were always fixed on the goal of improvement of basic principles for the conduct of the petroleum industry. Measures of pure expediency were abhorrent to him whenever they tended to nullify the broader permanent gains.

In our vast industry of conflicting interests and different opinions, he wove into the fabric of our industrial statesmanship a sustaining code of integrity that has gone far

to maintain this body in its determination to be of genuine service to our people and to the national security of our great nation.

The most valuable people around us have lived largely for others. Max Ball was such a person. He loved this battered old world of ours and its people, particularly in He served all with deep and abiding devotion. petroleum. We will never again hear the firm step of our beloved colleague or again see the calm yet wistfully gay engaging eyes of one who gave unstintingly of nimself to help others. God endowed this man, this remarkable man, munificently, and as was His wont with those He loved, He endowed him with an abundant intelligence and deep understanding. He wisely coupled great energy and vitality in the efficient and effective discharge of his manifold assignments and responsibilities for more than a half century. He will long be remembered for his many kindnesses and considerate assistance to the many who sought his advice, counsel, and aid. A good man, someone has said, is the finest work of God. Max Ball, by his living example, earned this high classification. He truly leaves to the oil and gas industry and to the American people a tremendous legend of magnificent humanitarian service.

In the passing of Max Waite Ball, his associates and friends in the oil and gas industry have suffered a real and irreparable personal loss, a devoted friend, and an outstand-

ingly loyal and efficient public servant has gone to his just reward.

Therefore, be it resolved by the members of the National Petroleum Council, that this resolution be spread upon the record of the Council as a memorial to its faithful and beloved member, and that an engrossed copy thereof be sent to his wife, son, and daughter, as an expression of the Board's deep and heartfelt sympathy.

I move the adoption of this tribute to this good and faithful servant, by standing in reverend and prayerful silence for a moment.

(A standing tribute)

CHAIRMAN HALLANAN: Gentlemen, you have previously received the minutes of the last meeting of the Council held on July 15,1954. What is your pleasure?

It has been moved and seconded that the minutes of the July meeting be approved as submitted.

All in favor say "Aye." Opposed?

So ordered.

Mr. Jacobsen, may I call on you to present the report of the Agenda Committee?

MR. JACOBSEN: A letter was addressed to Chairman Hallanan on October 18, reading as follows:

"Dear Mr. Hallanan:

"There has not been a complete census of tank trucks

used in and by the petroleum industry since the Council submitted its report of January 29,1952. It is necessary for the Government to keep this information on a reasonably current basis.

"More timely and complete information in this field will be of significant help to the Oil and Gas Division in the analysis of estimated wartime problems and in supplying information and advice to other Government agencies.

"Since there undoubtedly has been a large increase in the available equipment in use, it is requested that the National Petroleum Council undertake to make another study of over-the-road transportation as of the most recent date possible. It would be helpful if the following additional data could be included:

- "1. An estimate of the maximum increase of carrying capacity of the tank truck fleet that could be developed through emergency operating procedures.
- \*2. With respect to private carriers, an estimate of the number and capacity of semi-trailer tanks that could be used in over-the-road service.

"A report and recommendations which the Council deems appropriate will be of value to the Government.

"Sincerely yours,

/s/ "H. A. Stewart Director." The report reads as follows:

"Report of the Agenda Committee

of the

"National Petroleum Council

"October 18,1954

"Under date of October 18,1954, Mr. H. A. Stewart, Director of the Oil and Gas Division, Department of the Interior, addressed a letter (copy of which is attached hereto) to Mr. Walter S. Hallanan, Chairman of the National Petroleum Council, requesting that the Council undertake another study of over-the-road transportation (tank truck) as of the most recent date possible. It was also requested that the following data be included:

- "1. An estimate of the maximum increase of carrying capacity of the tank truck fleet that could be developed through emergency operating procedures.
- "2. With respect to private carriers, an estimate of the number and capacity of semi-trailer tanks that could be used in over-the-road service.

"As provided in the Articles of Organization of the Council this letter was considered at a meeting of the Agenda Committee on October 18, 1954 in Washington, D. C., at which meeting it was unanimously agreed to recommend to the Council the appointment or reactivation of a Committee to make the study as requested by Mr. Stewart in his letter of October 18,

1954 and to report to the Council.

"Respectfully submitted.

"A. Jacobsen, Chairman

"Agenda Committee."

I move the adoption of that report.

(There was a second from the floor.)

CHAIRMAN HALLANAN: You have heard the report of the Agenda Committee as read. All in favor indicate by saying "Aye."

All contrary, "no."

The report is unanimously adopted,

MR. JACOBSEN: I have another thing to mention which does not require action by this Council.

Under our Articles of Association if a matter of urgency is submitted to the Council for consideration between meeting dates, it may be dealt with by the Agenda Committee by means of taking polls by letter or telegram so as to save time.

A matter of that nature has come up since the last meeting covered by a letter from Mr. Wormser, Assistant Secretary for the Department of the Interior, dated July 30,1954.

"Dear Walter:

\*One of the recommendations made to the Secretary
of the Interior by a committee appointed to survey the
operations of the Bureau of Mines related to the continued

operation of the government's oil shale plant at Rifle, Colorado.

"The recommendation made by the committee and found on page 23 of the enclosed report, was as follows:

"'It is recommended (17) that the experimental work done solely by the Bureau on the production of oil shale and oil from shale at Rifle, Colorado, should cease, and that no further work be done with the new retort unless there is a substantial contribution by industry under a cooperative agreement.

""If industry feels that no further experimental work is necessary, then the facilities will have served the purpose for which they were developed and constructed, and disposition should be made in accordance with established procedures.

"It would be of great assistance to the Secretary of the Interior if the National Petroleum Council would give us the benefit of its advice as to the action we should take in light of the committee's recommendation. I understand the Council has already given the oil shale problem detailed study, which has proved extremely helpful to the government, so that I believe you already have a good background for a new examination of this government project and its value to the public.

"Sincerely yours,

/S/ Felix E. Wormser

Felix E. Wormser

Assistant Secretary for

Mineral Resources."

That letter was submitted to the Agenda Committee and the following report was rendered by its chairman to Mr. Hallanan under date of August 20:

"Dear Mr. Hallanan:

enclosing copy of letter to you from Mr. Felix E.

Wormser, Assistant Secretary of the Department of Interior,
requesting that the National Petroleum Council advise him
with respect to the continuance of operation of U. S.
Government shale oil plant Rifle. Acting under Article
14 of the Articles of Organization of the National Petroleum Council, the Agenda Committee by mail has now received
replies from all but one member of the committee. The
members who have replied have indicated that it will be
proper and advisable for the National Petroleum Council
to proceed with the study and report requested by the
Department of Interior and that a committee of the
Council be appointed."

That does not require any action.

MR. B.C. GRAVES: I think the census of the tank

trucks should be taken and at the same time, I think it might be well to take a census of tank cars.

CHAIRMAN HALLANAN: You are speaking on the original motion which has been adopted?

MR. GRAVES: I realize that, but I wish to call attention to the fact that an important and necessary thing in the emergency is to have a census of equipment.

CHAIRMAN HALLANAN: May I suggest that you submit a memorandum?

By supplementing Mr. Jacobsen's statement in accordance with the report of the Agenda Committee, the Chairman appointed a committee to deal with the subject matter of Secretary Wormser's request, a committee of which Major Hardey is chairman, and that committee has been engaged in a study of the assignment given to it, and the report will be submitted at a later time in this meeting.

Dr. Wilson, I am aware that your committee on the oil and gas defense organization has not finalized its work, but would you desire to make an interim report and advise the Council of the progress being made?

DR. WILSON: We really, in a sense, made a final report of the main committee on the over-all defense organization recommendations. At the same time, however, we raise the question with the Council as to some additional work that might be done by two subcommittees, and we had a supplementary

request from the Oil and Gas Division for such work. We have, therefore, during the summer, first circularized the members of the main committee for their nominations, and a considerable number of others for members to these two subcommittees.

We have organized two very representative subcommittees of twenty members, one to work out the detailed plan for maintaining company operations, a question of staffing should a disaster overtake in their headquarters.

Mr. H. G. Ganglesdorf of the Jersey Company is chairman.

Then the second one would be on advance precautions in disaster, especially in refineries which might reasonably be involved, and for that we have Mr. R. G. Arner of Sinclair who has agreed to be chairman.

The two chairmen are meeting with me and a couple of my associates in Chicago on Thursday to make detailed plans, following which they will have a meeting, probably a joint meeting of the two committees in Washington to be briefed on something of what we might anticipate in case disaster does come via the atomic bomb. Then they will get to work on trying to get out manuals and advice as to how to prepare for these two situations.

CHAIRMAN HALLANAN: Thank you very much, Dr. Wilson.

In the absence of Mr. L. F. McCollum, Chairman of the Committee on Petroleum Capacity, I am going to ask Mr.

3

Hines Baker to submit the interim report of that committee.

MR. BAKER: This committee has organized and set up subcommittees for each of the P. A. districts with Mr. J. P. Jones as Chairman of District 1, Mr. Ed Bullard in District 2, Ben Belt in District 3, Mr. W. W. Flenniken in District 4, and Bert Mattei in District 5. Those subcommittees are now engaged in the collection of the data and information.

It is contemplated that the work of these subcommittees will be completed before December 1st, at which time a meeting of the committee itself will be had to review the work and prepare the report.

CHAIRMAN HALLANAN: You think we may look forward to the report coming in time for the next meeting of the Council?

MR. BAKER: I would think so, if the meeting is around December 1, it should be able to do so.

CHAIRMAN HALLANAN: Gentlemen, you may recall that sometime ago, upon the motion of Mr. Frank Porter, the resolution was adopted that the Council should set up some appropriate method of recognizing the services of the men of the industry who have come to Washington and who have given of their time and services on a voluntary basis during the administration of the P. A. D. That seemed to represent an overwhelming desire on the part of the Council to take some steps to give recognition to those who had come forward and given of

their time and devotion to the problems that the Government confronted in the organization of the defense set-up.

Mr. Porter was named Chairman of that committee, and has had under consideration the matter of how this should be done.

As I understand, Mr. Porter, you are going to submit a report today. Frank Porter.

MR. PORTER: Mr. Chairman, the preparation of this report took a lot of checking and cross-checking of the various people that served in P.A.D., and, as usual, that job was handled very efficiently by Mr. Jim Brown of Staff, and I want to extend to them the thanks of the committee for their assistance.

The report is as follows:

Pursuant to action taken on January 29,1952, your committee has reviewed services rendered to the Petroleum Administration for Defense by 384 individuals in the 13 P.A.D. sections. Of this number 153 served without government compensation. Some of those who received government compensation did so at a personal sacrifice.

"The committee proposes that the National Petroleum Council should express its thanks in the form of a suitably worded and signed certificate to be mailed to each individual whose services were important aids in the cooperative effort of the petroleum industry with the

government and a valuable contribution to the Petroleum Administration for Defense."

It is proposed that this certificate will read as follows:

Secretary of the Interior of the United States expresses its thanks and appreciation to \_\_\_\_\_\_ for the distinguished service he rendered to the Petroleum Administration for Defense. This service to the Government was an important aid in the cooperative effort of the petroleum industry with Government and a valuable contribution to the national defense effort."

This certificate would be signed by the Chairman and the Secretary-Treasurer of the Council.

"In principle, the recipients of such certificates would include:

- 10 1. Deputy Administrators
- °2. Associate Deputy Administrators
- \*3. Assistant Deputy Administrators
- "4. Directors of Divisions
- "5. Assistant Directors of Divisions
- 6. Others serving without compensation

<sup>10</sup> On this basis certificates would be issued to some 180 of the 384 P.A.D. employees.<sup>10</sup>

This is the report, Mr. Chairman. I move its

adoption.

CHAIRMAN HALLANAN: You have heard the report submitted by Mr. Porter. What is your pleasure?

It has been moved and seconded.

All in favor of the adoption of the report indicate by saying "Aye."

Contrary, "no."

The report is unanimously adopted.

We now pass to the report of the Committee on Petroleum Storage Capacity, Mr. Lee Wescoat, Chairman.

MR. WESCOAT: Mr. Chairman, gentlemen: Since copies of this report will be available to all members and with the large number of figures and computations involved, with your permission I will brief the context of the report.

The current report of the Committee on Petroleum Storage Capacity is the fourth in a series which began in 1948. These surveys of unavailable inventories and storage capacity for crude oil, clean products as a group, and residual fuel oil have been made at approximately two-year intervals. The current report was compiled after recommendation to the Council by the Agenda Committee in connection with a communication dated March 22nd last from Mr. H. A. Stewart, then Acting Director of the Oil and Gas Division, Department of the Interior.

This survey bears out the basic findings of all of

of the industry for large storage capacity in relation to the amount of crude oil and products moving into and out of such storage in order to conveniently and economically supply the current and forward requirements of our customers.

The March 1954 ratio indicates that 100 barrels of storage is required for every 47 barrels of inventories contained therein, if the industry is to enjoy complete flexibility at all times in normal operation of its facilities. The 1952 ratio was 100 barrels of storage to 45 barrels of inventories; the 1950 ratio also was 100 to 45, while in 1948 it was 100 to 41. The 1954 crude oil ratio alone is 100 to 46; clean products 100 to 50, while residual showed 100 to 43.

Total storage capacity reported for crude oil, clean products and residual fuel was 991 million barrels, more than half of which was assigned to clean products — gasoline, kerosine and distillate fuel oils. By the end of this year an additional 29 million of capacity will have been added to bring the December 31 total to 1 billion 20 million barrels, an increase over March 31,1948 of 160 million. Interesting in connection with these figures is the fact that clean product storage by itself increased about 175 million barrels from March 31,1948 to anticipated December 31,1954, or 46 per cent. As might be expected, the majority of this increase (167 million) occurred in Districts I and II, the

large demand areas.

Another point confirmed by this survey as in the others, is the large portion of total reported inventories that are unavailable for shipment, in other words, that are wrapped up in the industry's far-flung manufacturing, storage and transportation systems, that must be kept intact if the industry is to function. On March 31 of this year these unavailables totaled almost 273 million barrels or 50.7 per cent of the 538 million barrels that were reported as in crude oil, clean product and residual inventories.

Included in these surveys for the first time this year is a study of the underground storage capacity of the industry. Each company was asked to report the underground capacity (a) "assigned to L.P.G. and/or L.R.G." and (b) "other products, if any." The only figures reported were in connection with L.P.G. or L.R.G. The total for the United States was approximately 5 million 500 thousand barrels as of March 31 last, almost half of which was found to be in the Texas Inland area. Arkansas-Louisiana Inland accounted for almost 750 thousand barrels, with Texas Gulf, Indiana-Illinois-Kentucky and Oklahoma-Kansas-Missouri areas all having size-able amounts.

The Committee wishes to again point out to those not familiar with oil industry operating problems that in no sense can the difference between the inventories and capaci-

ties shown in the survey be taken as an indication of available storage space. The four surveys completed to date may again be said to have definitely confirmed what individual long term operating experience has indicated -- that relatively low ratios of actual inventories to total storage capacity in service is essential if difficulties in processing, handling and distribution are to be avoided, and if the industry is to operate efficiently and well. The Committee therefore again stresses as proof of the foregoing reflections the operation relationships once more derived as a result of the current survey. It should perhaps be pointed out here, however, that some of the reported crude oil storage capacity is in areas where it is not currently available for use, and some of it, even so, not susceptible to relocation elsewhere because of its condition. Still other portions are available only for limited use.

None of the figures in this report include stocks or storage capacity, if any, in the hands of the military.

A total of about 350 questionnaires were distributed to refiners and other holders of crude oil and principal product inventories and storage facilities. Based on the inventories reported in comparison with those previously developed by the Bureau of Mines, the crude oil section of this survey represents 96.4 per cent of the refinery, pipeline and tank farm stocks of crude, and the crude oil in transit;

about 97 per cent of the clean products group, and 96.5 per cent of the residual fuel oil inventories as reported last March 31.

Your Committee appreciates this extremely gratifying response am takes this opportunity to thank the industry
for it and for so promptly returning the information requested.
Attached to the report in consolidated form are reproductions
of all of the questionnaire forms used in the survey, showing
all of the details of the inventory and storage capacity figures
and amounts unavailable for shipment, for each of the Bureau
of Mines refining districts with added separations for the
East Coast, Indiana-Illinois-Kentucky and the Pacific Coast
areas.

As is usually the case in matters of this kind, most of the work of the analysis and compilation has been done under the direction of Fred Van Covern in his individual capacity and in conjunction with the advisory subcommittee. Mr. Van Covern is present, and if there are questions which I can't answer, perhaps he would be able to.

CHAIRMAN HALLANAN: Thank you very much.

Are there any questions in connection with the report? Dr. Wilson?

DR. WILSON: Mr. Chairman, just glancing at this under Clean Products, on page 5, it says: "This capacity contains 231 million barrels as of that date." Then the next

paragraph says, "Of the 251 million barrels of this product as in storage" -- shouldn't that be 231?

MR. VAN COVERN: I don't think so.

DR. WILSON: Apprently you are referring to the same figure. I think 231, page 5, "Clean Products," paragraph 1, in themiddle, you say: "this capacity contained 231 million barrels."

MR. VAN COVERN: "That the total storage capacity assigned to clean products as of March 31 last amounted to 467 million barrels, and that this capacity contained, the amount in those tanks, was 231 million.

That is shown on the following page.

"That of the 251 million barrels of these products reported as in storage," the 251 as against the 231 is the amount that the various companies told us they had in storage as reported to the Bureau of Mines. That includes not only the amount in tanks but the amount in pipe lines and everywhere else. In other words, under column 7, table 2, we show the amount of reported inventory that was actually in tankage, but the total amount of inventory reported by the companies is in column 2. That shows 251, which is 97 per cent of the 259 million shown in the Bureau of Mines inventory reports as of March 31,1954.

DR. WILSON: It certainly sounded like it was the same figure. This capacity contains 231 million barrels, and

then you say 251 million barrels reported in storage.

MR. MAJEWSKI: It's too much in any event, isn't it?

MR. BRUCE BROWN: May I ask a question?

CHAIRMAN HALLANAN: Yes.

MR. BRUCE BROWN: Mr. Van Covern, what does L.P.G.

mean?

MR. VAN COVERN: Laquefied refining.

MR. BRUCE BROWN: No technical difference?

DR. WILSON: Olefines.

MR. BRUCE BROWN: Stored underground?

MR. VAN COVERN: Yes.

SECRETARY BROWN: Mr. Van Covern, I have had this question several times from the press, and I am pretty dumb; will you give me your explanation, I didn't seem to get it.

L.R.G. as compared with L.P.G., in other words.

MR. VAN COVERN: Bureau reports and all of the reports we see on the industry's activities use both terms, L.R.G. and L.P.G., L.R.G. being the liquefied refinery gases and the L.P.G. being the liquefied petroleum gases, as differentiated from refinery gases, because usually they are made out in the field in natural gasoline plants.

MR. BRUCE BROWN: Seriously, the L.R.G., the olefining portion of that is incidental, isn°t it? In other words,
it's simply because it came partly from the crack and it has
some olefines in it. You are not storing butylene and propylene.

MR. VAN COVERN: No.

CHAIRMAN HALLANAN: Mr. Brown, you have the information you sought?

Are there any further comments in connection with the report of this committee?

It has been moved that the report be adopted. Is there a second to that motion?

It has been seconded.

All in favor, indicate by saying "Aye."

All contrary, "no."

The report is unanimously adopted.

Thank you very much, Mr. Wescoat and Mr. Van Covern for this very thorough and valuable job that has been performed by the committee.

Gentlemen, we now pass to the report of the Committee on Shale Oil Policy, Major Hardey, Chairman.

MR. HARDEY: Mr. Chairman, I have a verbal interim report to make on behalf of the committee. As previously stated here, Mr. Wormser made a request for this study back in the latter part of July. The Chairman appointed a committee, the Agenda Committee approved the study as a matter of public policy, and your committee went to work.

I would like to tell the Chairman that I have had very fine cooperation from the members of the committee. We considered it proper to hold a study committee meeting in

Denver, and did that in the latter part of September.

At this meeting, a very fine presentation and intelligent presentation was made by Mr. Cortell and Mr. Ease and Mr. Guthrie of the Bureau of Mines, telling of their operations at the plant, and the result of this committee meeting in Denver was certain recommendations to the general committee. These recommendations were mailed to the general committee, and it was determined to hold a meeting of the committee yesterday aftermoon to make recommendations.

On yesterday, the committee, after discussing this matter, came to the conclusion that there were other factors of national supply that the committee should study in order to render an intelligent report on this subject, particularly we didn't have the information in the McCollum report on product—ive capacity, we didn't have full figures on crude availability, we didn't have Mr. Wescoat's report on crude storage capacity, and many other factors that have to do with national supply. Since this recommendation would have a real bearing on the national supply situation, your committee would like to say that it is not now ready to make a recommendation on this subject, and I will ask that we continue the committee and to report at a future time.

CHAIRMAN HALLANAN: If there is no objection, the committee will be continued to further study the problem of the shale question which has been presented by the Secretary of

the Interior.

Major, you probably will be in a position to render a report at our next meeting in January?

MR. HARDEY: I think we can conclude our report in December.

CHAIRMAN HALLANAN: The Committee on Use of Radio and Radar, Mr. Joe Keeler.

MR. KEELER: Mr. Chairman, the committee has not yet completed its report. We had thought it wise to include a study on the use of radio in the offshore drilling operations in the Gulf, and that has required a little more time than we had anticipated, but the report will be finished by December 1 and in time for the next meeting of the Council in January.

CHAIRMAN HALLANAN: Thank you very much, Mr. Keeler, for that interim report.

Gentlemen, we have a number of members from the Department of Interior, the Assistant Secretary is here and members of the staff. We do expect Secretary McKay a little bit later at the conclusion of the Cabinet meeting which he is attending this morning. I do want to present, before he has to leave the meeting, the Honorable Orme Lewis, Assistant Secretary of Interior in charge of the Bureau of Land Management, whohas taken a very fine interest in the work of this Council, and we are delighted to have him here.

Mr. Orme Lewis.

(Applause)

MR. LEWIS: I am here primarily to hear the reports made this morning and specifically for paying my respects to this Council. I have enjoyed attending the meetings each time that you have been in Washington since I have been here, and I hope I have an opportunity to attend them in the future.

I was particularly anxious to hear the report of the Rifle development, due to the fact that Wormser, who came a little later than I, has that in his field, but I found that I had his field in mind during the first few months after my arrival here, and one of the first items was Rifle and Louisiana-Missouri. So I feel that I have a little kinship to it and I will await the report in January with considerable interest.

Thank you very much for an opportunity to meet with you.

CHAIRMAN HALLANAN: Thank you very much.

(Applause)

CHAIRMAN HALLANAN: Gentlemen, I know the members of the Council are familiar with the work that is now being undertaken by the Cabinet Committee on Energy Policy. The former Deputy Administrator and a member of the Council, Mr. Edward Warren, is now serving on the staff of that organization and has come to Washington to give his time to that very

important work. Mr. Warren is here this morning, and we are honored with the presence here at this meeting of Mr. James F. Brownlee, who is Chairman of the Task Force of the Cabinet Committee on Energy Policy.

Mr. Brownlee, would you stand, and we would be delighted to hear from you.

(Applause)

MR. BROWNLEE: As you can perhaps realize, you are looking at a very unhappy fellow. My problems seem to be very numerous and certainly very difficult. Coupled with that the deadline that the President put on that report which is to be made to him is not later than December 1, and I think you compound the problem. However, we are hard at work at it burning a lot of midnight gas, oil, and coal, and I think and I am hopeful that we can come up with some constructive recommendations.

I did want to say to you that you have all been very generous and when we have requested staff help from you, help of men in your industry to make these studies, it has been forthcoming, and we are most grateful. We are undoubtedly going to ask for more advice, counsel, and help from you, and in advance I want to thank you for it.

(Applause)

CHAIRMAN HALLANAN: Thank you very much, Mr. Brownlee, we are delighted to have you here.

Ed, we are glad to know you are back in Washington again. We have a sense of security about your presence here, and I know the Council will be happy to hear from you as to anything you might desire to say in connection with your assignment with the committee.

Ed Warren.

MR. J. ED. WARREN: I don't feel too secure, Mr. Hallanan.

I think most of the people here know about this Cabinet committee, it is made up of the heads of six of the Departments, including the Department of Interior, Department of Defense, Department of State, Department of Labor, Department of Justice, and the Chairman is the head of the Office of Defense Mobilization, Dr. Arthur Flemming. Dr. Flemming appointed a Task Force, of which Mr. Brownlee is the head.

Mr. Brownlee is here like I am.

I was particularly anxious to bring him here today because I wanted him to see how the petroleum industry reacts to some of these Government obligations. The other two members are Mr. Charles Potter in the coal area, and I imagine you can announce Judge Robert Wilkins, who is a retired Federal Judge from the Ohio District, who will be sort of the public member on this Task Group. I think perhaps it will defend the public against the coal and gas groups. We are doing a staff job for the Cabinet. The decisions will be made by the

cabinet Committee, but it is very important that every point of view that controls, that has anything to do with energy supplies and resources for the future in relation to national defense and to the economic progress of the country be expressed and presented to the Cabinet when they make their decisions on recommendations to the President. Time has been one very limiting factor, and the security element has been another one, as far as our staff is concerned. So we have kept our staff very small, but we do urge that anybody who has a viewpoint present it to us in a brief form. We are not having public hearings because we don't have the power for action or decisions, we listen and accumulate information and will assemble this report. Beyond that,

MR. BROWNLEE: I think that is about the story.

I wish there were more of it, but there will be later, I guess.

MR. WARREN: Thank you very much.

(Applause)

MR. DUKE: I don't think anyof us envy the job of Mr. Brownlee or Ed Warren nor their co-workers, but I think we can all be very happy that this subject, which has long needed attention, is going to be laid out on the table where light can be shed upon it and the best way, perhaps the only way to come to any conclusion about problems of this nature, public interest, is to lay them out on the table,

examine them, let all sides be heard, and at least if some decision is to be made, it cannot be made from each person looking at it from his own industry viewpoint.

As one member of the Council, I am happy that such a study is being made.

CHAIRMAN HALLAMAN: Mr. Duke, I think you expressed the feelings of all the members of the Council on the work be-

Gentlemen, we are delighted to have here as your Manual Control of the morning, the Assistant Secretary of Interior,
Honorable Felix Wormser. I know from having met Secretary
Wormser from time to time since the new Administration took
over, that he has given a tremendous amount of devotion and
time and effort to the critical problems that face the
natural industries of our country, the mineral industry.
He has done amagnificent job, and from time to time, it is
very reassuring to me to have expressions that come from him
as to the appreciation which the Government feels for the fine
cooperation that it has had from the petroleum industry

through this Council.

"Secretary Wormser, we are pleased to have you here and delighted to hear from you any remarks that you may have at this time."

(Applause) Sustant Suritary of Action (Mineral Commes)

MR. WORMSER: "Mr. Chairman and gentlemen, at the out-

set, let me tell you how sorry the Secretary is that he cannot be with you in person at this moment. I am hopeful that the Cabinet meeting will adjourn in time for him to make his appearance. I know he always likes to go to these Council meetings, and he is deeply appreciative of the work of the Council and so, as a matter of fact, am I, and I can't say it too frequently.

"I believe that one of the good illustrations of the value of the Council to the Department is the fact that you are now wrestling with one of our thorny problems, what to do with the Rifle plant in Colorado. I shall await the committees report with deep interest. To my mind, it typifies one of the policy questions which all Government administrations are faced with, namely, how deeply should Government enter into research, and, after all, Rifle is purely a research problem. It is a research problem to develop one of our great latent resources, a resource which in time to come will be tremendously important.

"Now, the Survey Committee which we had eximining all of the work of the Bureau of Mines has come forth with the recommendation that we examine the position of Rifle. I know that there is a political aspect of it involved, but I am not so much concerned with that as I am with the deep principle involved as to where the Government shall penetrate in its research. I have felt right along that Rifle was

characterized by a problem that is on the frontier of knowledge, so far ahead in the future that Government is justified in spending taxpayers money to help solve that problem.

committee decides as to the future of this plant. How far are we justified in spending public funds? As you know, this Administration is committed to a policy of curtailing expenditures, and I think if any Administration in our history has shown what its intention is, the result certainly of this Administration, which has cut some \$7 billion from expenditures has indicated it means business. You may say that Rifle involves only a comparatively small expenditure, \$1,750,000, as I recall. It is comparatively small, perhaps, compared with the billions that our Government spends right along, but again I say there is a principle involved here as to when industry shall take over on a research problem and when the Government shall disappear from the field.

"I hope, Mr. Hardey, that your committee will pursue its thorny deliberations, and will come forth with something for us so that we may go to Congress, which in the final analysis will have to make the final decision.

"I thought today also that I would bring to your attention something which I believe characterizes the philosophy of the Interior Department in a way that I think was put so beautifully, and unfortunately did not receive wide currency

because it took place at the induction of our new Secretary of the Interior, Clarence Davis. He made a statement with reference to our natural resource problems which I want to read to you now. It won't take a minute, but it will express the Secretary's philosophy and the philosophy of my colleagues and the philosophy of the Administration.

"He said, when he took the oath of office, about our policies:

" Those policies consist primarily in a return to the historic American way of the development of the natural resources of the country by the initiative and the industry of its citizens and not under the dominating hand of a Federal bureaucracy. The great resources of America, the industrial might which is our pride, are the products of a free economy and the ingenuity and drive of our people. The false and demagogic accusations of give-away are belied by our entire They can only be the slogan of those persons who history. believe that all of the natural resources of the country should remain perpetually under Federal cownership and management to be developed and controlled by a Federal bureaucracy to the exclusion of individual opportunity for the citizen. This means also, of course, that all workers in the field of natural resources would be upon the Federal payroll and subject to the political bazards and restrictions that go with Government employment. That philosophy, as I have said many times,

if it had been pursued from the beginning would mean that all the land west of the Appalachian Mountains would still be owned by the Federal government and most of us in the West would be dependents of the greatest bureaucracy in history. America has become great because its farms, mines, and waters have been available to its citizens for development, each according to his talents. This does not mean that the natural resources may be despoiled or wasted; that cannot be tolerated. It does mean the pursuit of a consistent program of conservation and of orderly and productive use of these resources so that each succeeding generation will have their use without undue imperilment of the generations yet to come. Certainly, conservation and Federal ownership are not synonymous Perpetual Federal ownership may well represent stagnaterms. That is not the way America has become great. tion.

"I thought you might be interested in having that in your record."

## (Applause)

CHAIRMAN HALLANAN: Mr. Secretary, I know that the statement made by the new Under Secretary is heartening and it will certainly find a wholesome reaction as far as the oil industry is concerned.

Thank you very much for giving us the opportunity to hear that.

General White, are you prepared to tell us something

about the military petroleum requirements? Cleb tata for agents. " But July July Company Compa it might be appropriate to try to answer a few of thequestions which have come to the Department of Defense.

"I will tryto deal with two of those problems, and with the Chairman's permission. I will try to become a professional clay pigeon and try to answer any questions that the clammy hand of security doesn't throttle me from answering.

The first question which hasbeen asked by numerous members of industry and increasingly of late has been what we visualize as the increase in consumption in the defense department of fuels under so-called peace time conditions. We have tapped all of the sources of information which we had available to us, and have come up with a picture as we now see it, using a crystal ball of course, to some extent, at least in our prognostications of what will happen in the future.

I think that the chart which you see here shows without a great deal of extransous conversation what our program looks like in connection with the use and consumption of jet fuel in the event that we don't have a catastrophic war.

"These are all fiscal year figures, gentlemen, and will very well interpolate themselves if your own figures and the figures of our own research people need comparison.

"In fiscal 1954, we actually purchased JP-4 jet fuel at the rate of 117,000 barrels a day. Our program, which

Colonel Gilliam will talk about in more detail for current production shows that we inthis fiscal year -- that is, until the first of July 1955, will purchase JP-4 at the late of 184,000 barrels a day. From there on the increase is rather marked through 1957, the reason for that, of course, being that that is the target date by which the Air Force will have reached its 137 wing strength which is now authorized by Congress. From then on the increase is not quite as spectacular.

"It should be borne in mindin connection with the jet fuel figures that by far the largest portion of this fuel will go into consumption. That is based upon our concept that in the case of jet fuel we do not need as large a strategic reserve in being either in this country or abroad as we do in the case of the more complicated aviation gasoline. We do intend to distribute jet fuel to overseas bases as the funds are made available to us for construction of storage facilities. The storage facility program is now lagging behind the actual acquisition of aircraft and one of the problems which faces us with the next Congress is to try to hasten the construction of new storage for the operational reserves of our overseas bases.

"Are there any questions that anyone would like to

In response MR. MAJEWSKI'S MIS this all JP-4, General? GENERAL WHITE: Wes, sir. In connection with that,

Mr. Majewski, the utilization of a heavier fuel, one that we call for want of a better term, a JP-5 type of fuel, will increase over this period, but it is primarily designed for supersonic aircraft and in supersonic missiles and the barrel per day consumption is so small that it is rather insignificant as a national problem, we think.

As a matter of fact, we have not yet determined just what the characteristics of that fuel must be in order to make it suitable for use in the supersonic type of ctivities where there will be high temperatures, due both to the skin friction of the aircraft or the missile, and also to the fact that it will be necessary to cool the lubricating oil of the power plant by means of the fuel because we can't have any excrescences like the old style radiators to do that job.

QUESTION: General, I assume the one word to be emphasized up there is "peacetime".

GENERAL WHITE: Yes, sir.

QUESTION: It does not reflect what you might need in an emergency?

GENERAL WHITE: That is correct. I gave you a crystal ball job on what might happen in the event of an all-out war at our last meeting.

"The other item which seems to be of almost universal concern in the industry is what is going to happen to aviation gasoline with all the turbopowered aircraft both commercial

الرري

and military. We have again tried to tap governmental and civilian sources of information to come up with our best guess as to what will happen to aviation gasoline for the same period of time. Once again we have our actual figures for fiscal 1954, the period ending the first of July of this year. You will notice the Military purchased at the rate of 118,000 barrels a day of all grades of aviation gasoline.

"In this particular presentation, I haven't attempted to breakdown the fuels by quality, but in the case of the Military, the division between 115 and 145 and lower grades was approximately 50-50, I believe.

will deal with in more detail, calls for purchase of fuel at the rate of 124,000 barrels a day. From there on, there will be a gradual leveling off of the consumption of military fuel in the piston engine category. However, we must bear in mind and very strongly the fact that there is an increase in the alkylate content of the fuels which we will buy. In this year, the increase in 115 grade fuel will be 5 per cent over that purchased in 1954, and we visualize a slight increase in the relative proportion of 115 over that of the other grades straight down the line, so that when we come out to 1960, although we are guessing that, we will purchase at the rate of about 100,000 barrels a day and there will be an appreciably larger proportion of 115 in those purchases than

`

is the case today.

"The U.S. chvilian figures are rather self-explanatory, and they are surprisingly in agreementwith studies made by some of the oil companies and by the aircraft industry.

There again, as most of you know, the newer piston engine aircraft which are coming into service and which are still on order, about three-quarters of a billion dollars? worth are being delivered this year or are still on order, will be burning 115 and 145 and there again is an increased demand on the alkylation capacity of the industry.

The yellow portion at the top of the charts represents our best information on actual performance again in the case of 1954 and the estimates of the increase in the foreign consumption due to foreign civilian activities and foreign military.

DR. WILSON: "Is that demand from this country?"

GENERAL WHITE: "This is the complete demand."

DR. WILSON: "Partly made abroad?"

GENERAL WHITE: Estimate of all consumption.

MR. BRUCE BROWN: "Do you assume that civilian aircraft using more than the one hundred fifteen or one hundred forty-five will be greater as the years go by?"

GENERAL WHITE: "I would guess, Mr. Brown, that the spate of orders which are now in hand with the aircraft manufacturers might be just at its peak. The thing we ought

A Section of the second

only way you an have an aircraft go out is to have a catastrophe, and that is because of two things, one is that they cost an awful lot of money in the first place, and the second is that under the regulations of the Civil Aeronautics Administration they have to go through an overhaul periodically, regularly, and every time that they do, they are brought more or less up to date.

"It might be interesting to know that a recent survey showed that the very first DC-2 which was built is still on regular scheduled operation in South America and since these aircraft do not wear out, they will just be relegated to more and more mundane service as they go through the cycle and the turbopop and jet come out on top of them.

We will find, therefore, as we go along, DC-6s and DC-7s carrying nickel ore in Nicaragua.

MR. BRUCE BROWN: "With 115?"

?

"Maybe I didn't understand your answer, but what I was getting at is this: You said that as the years go by more and more of the military requirements for aircraft will be for 115 and 145?"

GENERALWHITE: "Yes."

MR. BRUCE BROWN: What I was asking was: is that true for civilian?

GENERAL WHITE: " Yes, to a certain extent, but not a

larger extent than the military. All the new aircraft on order are 115 or the same fuel with only 3 cc's leaded."

MR. BAKER: "General, you speak as though 115 is probably going to be high quality."

GENERAL WHITE: 'So far as we know, Mr. Baker, there isn't sufficient encouragement to the aircraft industryto go to a higher grade of fuel except for very special purposes.'

MR. MAJEWSKI: "Would you say that starting with fiscal 1956, that we would be as much as 50 per cent of 115 and 145?"

GENERAL WHITE: " Military?"

MR. MAJEWSKI: 'No, U. S. civilian."

GENERAL WHITE: "I don't believe it would be that high a percentage. If I had to guess without looking at the figures I would say more nearly 40 per cent of 115 or maybe 35. Outside United States is where most of the older aircraft are being used, the DC-3s and even Ford Tri-motors. There are still 25 Ford Tri-motors in active service and they made the last one in 1927."

DR. WILSON: How does the figure there for military in 1954 and 1955 compare with fiscal 1952 when you were in the Korean war? Do you happen to recall about what that was?

GENERAL WHITE: "Fiscal 1953, I do recall, and that was at the rate of 105,000 barrels a day."

DR. WILSON: "So that the peace time use is more than

the Koran war? '

GENERAL WHITE: "Yes, sir.

"If there are no other questions on these particular points, I have been asked several times since the last meeting of the Council why we felt it was necessary in the Department of Defense to have another supply and demand study made so soon after the very complete study that was made under the auspices of the Petroleum Administration for Defense and which was delivered to the Defense Department early in 1953.

and the more important of the two reasons, is the knowledge that our potential enemy, Russia, now has the hydrogen bomb and atomic bombs in various guises and that they have the capability of delivering these weapons on our shores. That, of course, caused a completely new re-examination of all of the strategic and over-all plans of the Department of Defense, and it was publicized, of course, as the new look in defense when that reappraisal began.

"As a result of that reappraisal, the Chiefs of Staff have come upwith a new capability plan, as they call it, strategic capability plan, which they have handed to us to examine to see whether that plan is feasible from the stand-point of fueling such a war.

The basic considerations have changed materially in that with the advent of these new very high yield weapons

the matter of what is going to happen to the refinery complexes in the United States, the transportation facilities in the United States, personnel inthe United States, has had to have a new look taken at it and a new re-examination of what would happen to us after any cataclysmic strike by the Russians.

Also, in line with the developments which we know and which have been highly publicized that the Russians have made in the field of atomic and thermal nuclear weapons we have hand in hand and we hope fervently in advance of that, new weapons available to our own forces, land, sea, and air Therefore, the picture which was examined and which resulted in the very thorough and excellent report known as PAD 435, are no longer in force, and we have of necessity to reexamine them as rapidly and as carefully as we can to come up with the picture as it is seen today. PAD 435 is mot done in vain, by any manner of means. I am sure Mr. Keeler will touch on the activities of the military petroleum advisory board, but the committees operating under Mr. Keeler's chairmanship are finding that they can utilize a great deal of the information in PAD 435 and thus cut corners on the new Therefore, although we may seem to be very importunate in our request for aid and advice and hard labor on the part of so many oil executives, it is a job which is completely vital to us, to every one of us here, and the sooner we get it done the better off we will be in the planning sections

of the Department of Defense.

"If there are any questions on that aspect, which I know the answer to, I would be glad to try."

CHAIRMAN HALLANAN: Any questions, gentlemen, that you desire to submit to General White?

Mr. Baker, did you have anything further in mind? General, thank you very much.

DR. WILSON: I would like to say I certainly would like to express, on behalf of the Council, our appreciation for one of the best pictures of the over-all situation military and civilian that has ever been given.

GENERAL WHITE: Thank you.

(Applause)

CHAIRMAN HALLANAN: Along the same line, gentlemen,

I desire to present Colonel Arnold C. Gilliam, Director,

Armed Services Petroleum Purchasing Agency.

COLONEL GILLIAM: Good morning, gentlemen.

(I just completed a little trip out to the Far East, Korea, Japan, Formosa, and Okinawa, and I would like to report that I did not find any shortage of petroleum.

Lever since the last time I had the pleasure of meeting with the Council, there have been very few changes of importance in the procurement program, in fact the total 1955 requirements I mentioned at your last meeting are essentially the same. However, in several instances, the phasing

has changed in the program, such as a recent request from the Air Force that we purchase an additional three and a half million barrels of jet fuel for delivery before 31 March.

I would like to point out that this does not change the overall figures which I gave you at the last meeting.

\*\*Except for the jet fuel, the bids were opened last week in ASPPA and the response from industry was quite good.

"From our experience of the past year, we feel that use of formal advertisement in purchase of jet fuel, as well as for most products other than highoctane aviation gasoline, has proved to be highly beneficial to both Government and the petroleum industry, and so we intend to pursue that method for the foreseeable future.

You have probably also noted that the ASPPA bulk requests for proposals of grades 115 are less for the second half than for the first half of the fiscal year.

"While the same as jet fuel, this is the same situationthat there is no reduction in the total requirements.

(/Last March, when the first half bulk requirements were stated, ASPPA could not be sure when certain new Government-sponsored alkylation facilities would come on stream.

Meanwhile, some of these facilities have become operational, which has resulted in reduced requirements from industry in general and eliminated the need for ASPPA to buy incremental cost av-gas. This situation has come about

by the wholehearted cooperation of the petroleum industry to increase alklylate production capacity, both by independent action and by Government assistance in one form or another.

"The results of this program merit a"Well Done!" to the petroleum industry.

"We feel that ASPPA, the Military departments, and industry, have made strides in the past year to improve cargo liftings through better exchange of information and increased attention to planning.

"As you know, there is a constant struggle of coordination in lining up our ships and our products with the needs of the theaters and the operations of refiners, because of the many inevitable changes that can and do occur.

// We are still giving a great deal of attention to this problem in order to avoid underliftings or emergency changes in liftings.

"In reference to General White's comments to be giving more details, as I pointed out before, the figures remain essentially as of the last time. By the next meeting, I hope I can give you a little more guidance for the coming year.

Gentlemen, I appreciate your asking me here, and I hope I will be asked back for the next meeting, and if I can answer any questions I will be glad to try and answer them.

CHAIRMAN HALLANAN: Are there any questions, gentle-

wer, of Colonel Gilliam? (Applause)

7

CHAIRMAN HALLANAN: Mr. Keeler, Chairman of the

Military Petroleum Advisory Board.

MR. KEELER: Mr. Chairman, at the last meeting I reported we were still in the process of organization. That is all back of us or essentially back of us.

During the first week of September, the Military handed us a great big pack and we have our teeth in it now and are trying to unravel it.

Now, in connection with some of the points that General White has brought out, I would like to say that because I think I have had this question from several sources, I would like to say that we are not going to attempt to completely review every bit of data that are available in the past and rehash and work it over. Wherever we can, because of the urgency that the Military has stressed in getting answers, we are going to take reports from the NationalPetroleum Council, we are studying the PAD records, the great fund and file of data that Bruce Brown and Ed Warren, during their time, got together for us in connection with their defense problems, we are calling, of course, on industry, some of the groups studying the foreign picture, we are wrapping that up, are attempting to wrap that up, and correlate it just as quickly as we can. That earlier report that was furnished was a very complex report, and it took, I think, probably a little bit above ten or twelve months to actually complete.

"In this particular instance, the Military asked us to complete that report in a month. Now, obviously, we can't do that well. We are shooting for something under six months. We are not in shape at this time, Mr. Chairman, to make a report on the progress other than to say that we are hard at work, and I want to take this opportunity to thank all you people here in the National Petroleum Council that we have called on to date to help us out. We appreciate it and we hope the General won't be too far behind in getting his information.

CHAIRMAN HALLANAN: Thank you very much, Mr. Keeler.

Gentlemen, it is my pleasure now to present to the

Council the Director of the Oil and Gas Division, Mr. Hugh

Stewart, whose appointment as Director was recently announced.

Hugh, whether youare acting or full, you are still the Director to us. Hugh Stewart.

(Applause)

MR. STEWART: Thank you.

I didn't find that it was any particular handicap to serve as Acting, and so far as I could see there was no difference in the operations. Of course, the official appointment makes it legal, but we are getting things done anyhow.

I want to back up the comments that Bill Keeler has made with respect to the Military Petroleum Advisory Board.

The problem that the Military handed us was complex and because

of the new look which General White referred to, it required a breakdown in some elements that was more searching than we had ever before had to work out. We, of course, had delays in getting the Board established, getting its committees set up, and getting them cleared. As of now, we have approximately 150 committee members officially appointed, enough so that the Board can really get down to handwork, and I can assure you from all the lines of evidence that I have been picking up, they are at work.

not the work the Board is doing or some elements of that work may overlap some of the work done by the Council. I don't think that is at all true because the requests we make of the Council are normally broad. We try to keep from asking Council questions that involve too much security. On the other hand, we do ask the Military Petroleum Advisory Board for detail that does include a lot of classified material, and under the problems that we now face in the planning, we have to dig into local phases to a degree never before done."

Now, in connection with the oil and gas division itself, you may remember that the last two meetings I was crying on your shoulder for more help. Well, we have gotten some more help, not enough yet, but I want to introduce three new staff members. One of them is Mr. John Bower.

He is Assistant Director in Charge of Programming.

Now, you people in industry don't like that word "programming,"
but in the Government set-up it is the only word that seems
to explain what they are doing.

MR. MAJEWSKI: You should have a little more of thatin industry.

MR. STEWART: Thank you. John Bewer brings to us some thirty-five years of experience in petroleum statistics research and economics. I can assure you that he is taking hold and really shaping up our programming efforts.

Now, we have another man whom we have sorely needed, Bill McEldowney in charge of domestic transportation and storage. Bill, will you stand?

(Applause)

Now, for a fellow who came into Government completely uninformed, shall we say, on Government routine, I have been watching Bill for the last thirty days, and he is taking hold in a way that is going to help us a lot.

Our third man is Mr. A. H. Rarling, a refining man. Will you stand, Al?

(Applause)

He is rapidly clearing up our backlog of tax amortization cases.

I notice the Secretary has just come in.

CHAIRMAN HALLANAN: Go ahead and finish.

MR. STEWART: I really have nothing more important messay. "I want to thank the Council again for these reports, and I want to assure you that now with no Petroleum Administration for Defense withthis large staff, we who are trying to carry on this Government planning with respect to oil and gas are finding that we are dependent more and more on the Council for its advice and assistance, and I can assure you we are getting it.

Thank you.

(Applause) Presentation of form he Resident The State of the Council, I

think I stated in my opening remarks this morning that this particular date for the meeting was fixed because we had assurance that Secretary McKay would be able to meet with us at this time.

I was a little bit disturbed to hear at first that you weren't going to be able to make good on that assurance.

here from the Cabinet meeting this morning. I want him to know that we are still carrying on in the best way that we know how as the oil part of your team, to answer every response of the Government in this time of national defense and our national security program. We have a fine attendance here, we are back in the room where we started, in your Conference Room, and we are delighted at this time, Mr. Secretary, to have

you . 🏷

Secretary McKay. //

(Applause)

\_(The remarks of the Secretary were made off the record.)

CHAIRMAN HALLANAN: Gentlemen, the Secretary came in just at the right time. I think he left us all in a very happy state of mind. We have finished our agenda; is there any new business?

MR. DUKE: We didn't have an opportunity with Mr. Stewart. I would like to ask if you are inclined to add to this tank truck study, the tank car study, which I believe Mr. Graves suggested. I would like to ask, sir, if it is appropriate that you broaden that one step further.

I see, McEldowney, a new Transportation man, and remembering that the ODM have evidently called upon your Divisionin connection with this Gulf to the East pipe line, that may be developed under some circumstances, remembering that that has a rather definite impact on ocean transportation that might be displaced, should there be a pipe line built, and you will remember we had some discussions about that a meeting some months ago.

Then there is connected with that, Hugh, a program which the Maritime Administration are developing that would entail the trade-in and building of additional tankers. Now,

that doesn't add anything to the total tanker availability, because they will retire into reserve, those that are traded in, so it is merely an offset of the new.

But then we have another program which the Maritime Administration are not handling but instead the Navy Department, which is to bring into existence approximately 19 new high speed tankers.

My point is, Hugh, that there seems to be no place in Washington, and this is an oil matter, where there is any interlocking so far as I know of this ODM pipe line program, the development of additional transportation tankers for the Navy, the program which the Maritime Administration are sponsoring, and properly, and then finally, the continued operation of the Government-owned fleet, that is to say, the remaining 36 or whether they appropriately might be retired into esserve or whether in the public interest they ought to be continued.

What I would like to ask, sir, is it necessary for some of us to write a separate request for consideration of this matter in the public interest, not in the interest of ship owners or oil men, or whether you could broaden this study—that is, this tank-truck study to include tank cars and the ocean transportation?

MR. STEWART: Gordon, so far as the tanker transportation is concerned, we already have that study under way under

the Military Petroleum Advisory Board. We will have ample information on tanker capacities coming out of that.

In asking the Council to undertake some of these studies, we are trying to give the Council those studies which they can readily and appropriately make and not burden them withother studies that we can carry on in some other manner.

Now, so far as the tank car problem, the tank car survey suggested by Mr. Graves, he has been requested to submit a letter setting out the detail that he think should be included, and we will be very glad to ask that, because tankers are one element that we haven't gone into very far in our work, but we do have the tanker study under way. If you or any other Council member think that some particular study, this or any other, would be desirable, it is entirely appropriate to submit that to your Chairman, and if it is the type of study that is needed we will be very glad to ask the Council to undertake it.

MR. MAJEWSKI: I am a little surprised that Gordon didn't add to that maybe you would like to undertake a study to determine the oil policy of the Council. You know the Council never dealt with specific pipe lines and specific things, but here the Council has the national oil policy of the Council on foreign oil imports. How do we go about writing a letter to the Secretary or Mr. Wormser, how do we get a letter to you that will get a committee to see if the industry actually

is living up to the national policy dealing with supplementary or supplanting imports? That is what you ought to undertake rather than fose pipe lines. We have so many pipe lines we are drunk with them. We ought to take a rest and find out what we are doing with them. Too many facilities.

I know the Cabinet level will take them, but they won't do anything about them, Department of Justice, or something.

Here is something live, part of the constitution of the Council. Anyhow, how do we go about getting the Council to study the question of whether the national oil policy is being carried out on the subject of foreign oil imports?

That is the question, I think, of real importance.

MR. JACOBSEN: I am speaking from memory, but under the Articles of our association, whatever you call it, of the Council, it is stated, I believe, that any subject that any member might wish the Council to consider is to be covered in a letter addressed to the Department of the Interior and then the Secretary of the Interior or the Oil and Gas Division will decide whether it should be submitted or not; is that right, Jim?

CHAIRMAN HALLANAN: That is right.

MR. MAJEWSKI: I am aware of that, too, but I thought maybe I could hang my kite on Gordon's tail.

MR. STEWART: I don't know whether I am in any

2

position to reply to all that Barney had to say. Personally, I think that when the President's Fuel Resources Policy Committee get through, that it might be then a very appropriate time to ask the Council to make a study and give us information on how their policy recommendations can be carried out. But right now, I have my doubts as to whether a request of the Council for a new policy study would be particularly helpful.

MR. MAJEWSKI: I don't want a new policy study.

I want to find out how you make a thing that you already
have that has been widely acclaimed and not being lived up to.

I am trying to find out how you get that.

CHAIRMAN HALLANAN: Barney, I think Mr. Jacobsen covered it.

Is there any further business?

It has been moved that we adjourn.

All in favor, indicate by saying "Aye."

So ordered.

(Whereupon, at 12:20 p.m., the meeting was adjourned.)